



Since February 1999 the Executive Office of Environmental Affairs has been working with Regional Planning Agencies to complete a buildout map and analysis for every community in the Commonwealth. The buildout analysis consists of a series of geographical information system (GIS)-based maps as well as charts and text. This analysis is a crucial first tool in the creation of a Community Development Plan.

The GIS maps illustrate the amount of development your community would see, based on maximum development permissible under existing zoning regulations and resource protection bylaws. In other words, what would your city or town look like if every piece of available land were actually developed under your current zoning? And what impact would that development have in terms of population, demands on public services, and consumption of resources?

Some communities may learn that their zoning does not reflect planning objectives, or fails to protect their most important natural assets and elements of community character, or doesn't allow a specific type of development that the community desires or needs. The maps illustrate that, although a community may currently be relatively rural or stable now with relatively little development, economic growth and development, which often occurs at a steady, slow rate, may gradually change the character and land use patterns over time.

Taken as a whole, the GIS map and buildout analysis is a graphic depiction of where your community could be heading. Its value is both informational and motivational: it can be a catalyst to create interest in the planning process and a sense of urgency about the need to guide change. The analysis may help local officials and residents realize that only proactive and adequate planning for future development can ensure open space areas, suitable transportation infrastructure, an adequate and diverse housing stock, and appropriate economic development.



## UNDERSTANDING AND INTERPRETING THE BUILDOUT MAPS AND ANALYSIS

Each GIS map illustrates a different aspect of development potential and constraints. The maps function as a series of layers of information; together they make up a composite picture of how current conditions and regulations might affect future development.

### MAP 1: Developed land and absolute constraints

#### What the map shows:

Land that is already developed or absolutely constrained appears in color. Colors indicate different types of constraints, such as permanent open space restrictions and environmental regulations. Different colors are also used to represent land that is already developed, and other lands unavailable for development, e.g. utility corridors.

Land that is left white is available for growth and development subject to community zoning and other development regulations.

#### What it tells you:

- Which land is already developed/protected.
- The relative proportion of land zoned for housing vs. land zoned for commercial uses.
- Where recent (e.g. in the last ten years) development has been occurring.

### MAP 2: Developable land and partial constraints

#### What the map shows:

Developable areas are shown in color. Colors indicate different land uses permitted by zoning (residential, commercial, industrial, etc.).

Another layer of information (lines and bars) illustrates partial constraints arising from environmental protection and other considerations.

Accompanying Map 2 is a spreadsheet analyzing how many additional housing units and how much commercial/industrial space could be constructed, based on current zoning, identified by type.

#### What it tells you:

- Which land has development potential and how much development can take place.
- The relative proportion of land currently available for new housing vs. land available for new commercial uses.



#### Question:

*What's the difference between an absolute and a partial constraint?*

#### Answer:

*An absolute constraint means that no additional growth is possible because the land is already developed, permanently protected, or regulated.*

*A partial constraint means that future growth is possible, but will be limited by regulations, geography, or other factors.*





## MAP 3: A simplified composite of Maps 1 and 2

### What the map shows:

Developable areas are shown in purple.

Lands that are partially constrained are shown in a red stipple pattern.

Land that is unavailable for new growth because it is already developed, permanently protected, or unavailable due to regulations is shown in yellow.

### What it tells you:

- Location of undeveloped pockets within developed areas that might be targeted for new public open space or new infill development.
- Is development occurring where it makes sense (i.e. adjacent to existing development, where infrastructure is available, etc.)?

## MAP 4: Aerial orthophotographic map

### What the map shows:

An aerial photograph of your community, showing recent conditions at the same scale as the GIS maps. Aerial photos range in date from 1992-1999.

### What it tells you:

- This picture translates the abstractions of the maps into reality.
- The actual texture, character, and quality of both developed and undeveloped land in your community.



### Tip:

*Your consultant or RPA can provide a more complete description of the information contained in a buildout analysis and the implications of that information.*



This guidebook contains 8 1/2" by 11" copies of the large-scale buildout maps and analyses presented to the community by EOE. Communities are encouraged to use the large-scale buildout maps for their discussions.

# BUILDOUT ANALYSIS, GIS MAP, AND COMMUNITY DATA PROFILE FOR YOUR COMMUNITY

COMMUNITY  
A  
DATA PROFILE



